ABOUT IDIOCERINAE LEAFHOPPERS: V. BALCANOCERUS, A NEW GENUS FOR CHUNROCERUS BALCANICUS ZAKHVATKIN, 1946

(Homoptera: Cicadellidae)

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ABSTRACT—Zakhvatkin established the genus Chunrocerus with Idiocerus niveosparsus Lethierry as the type. As this species belongs in Idioscopus, Chunrocerus is therefore a synonym of Idioscopus. Baleanocerus is proposed as a new genus to include baleanicus, the only other species included in Chunrocerus, as this species properly belongs in a genus distinct from the others in the subfamily.

I am grateful to Dr. C. W. Sabrosky, from the Systematic Entomology Laboratory, U.S. Department of Agriculture, Washington, D.C., for

his assistance in elucidating this nomenclatural problem.

Zakhvatkin (1946b: 155)¹ described the genus Chunrocerus to include Idiocerus niveosparsus Lethierry, as he correctly considered that this species does not belong in *Idiocerus*, and called it the type of his new genus on page 156. At the same time, on page 155, he included Idiocerus balcanicus Horváth in his new genus. Baker (1915c: 338) described the genus Idioscopus with Idiocerus clupealis Lethierry as the type of the genus. In this same paper he included *Idiocerus niveo*sparsus in Chunra. Idiocerus clupealis Lethierry and I. niveosparsus Lethierry are congeneric and both belong in *Idioscopus* as demonstrated by me (Maldonado-Capriles, 1964). Therefore, Chunrocerus is a synonym of *Idioscopus*. A new genus *Balcanocerus*, is proposed to include Chunrocerus balcanicus (Horváth) as this species represents a genus distinct from the above. Zakhvatkin's description and illustrations, on pages 155 and 156, clearly distinguish between Chunrocerus and Idiocerus. Herein I illustrate the aedeagi of Balcanocerus balcanicus, new combination, and Idioscopus clypealis. The aedeagus of the latter is quite similar to that of Idioscopus niveosparsus. Other details of the male genitalia of B. balcanicus are also illustrated. These drawings were kindly furnished by Mr. F. Heller, from Staatliches Museum fur Naturkunde, Stuttgart, Germany, His drawings are from Horváth's type and this from Vranja, Servia, Horváth collector, 1902.

Balcanocerus, n. gen.

Type-species: Idiocerus balcanicus Horváth.

Relatively wide across head in relation to its body length (58/20=2.6); length of head, thorax, and scutellum slightly over $\frac{1}{2}$ of body length. Face and vertex

¹ Complete references to literature prior to 1956 will be found in Metcalf's Bibliography of the Cicadelloidea, 1964, Fasicle IV of the General Catalogue of the Homoptera. References to cited literature appearing after 1955 are given under "References" at the end of this article.

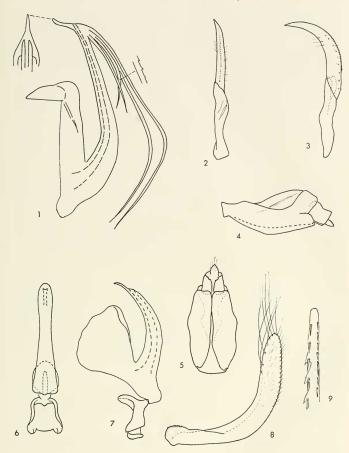


Fig. 1. Idioscopus clypealis (Lethierry), male aedeagus, lateral. Figs. 2–9. Balcanocerus balcanicus (Horváth), male holotype: 2, style, dorsal; 3, style, lateral; 4, genital capsule, lateral; 5, genital capsule, ventral; 6, aedeagus and connective, caudal; 7, aedeagus and connective, lateral; 8, valve, lateral; 9, outer edges of hind tibia.

shagreen. Distance between ocelli about 1½ times more than distance from ocellus to eye. Upper extremities of clypeus well defined, reaching ocelli of corresponding side, Pronotum 3 to 5 times longer than vertex. Scutellum shorter than pronotum and vertex together, but feebly raised basally or practically flat. Four apical and

three anteapical cells. First apical cross-vein of forewing close to bifurcation of R resulting in: 1) first subapical cell very small, smaller than all others; 2) this small cell is narrower at base than apically; 3) the first apical cell consequently is longer than the other apicals. Fore-wing, across mid-length of clavus and adjacent half of corium, with peculiar snow-white callose ornamentation. Clavus with fine punctures along both sides of discal veins and along inner side of marginal veins; corium with fine punctuations along both sides of veins R, M, and Cu, and inner of C. Fore and mid legs glabrous. Hind leg: femur with two apical spurs; tibia oval-flattened in cross-section, slightly curved; upper outer margin with many short spines appressed to shaft of tibia; lower outer margin with first two spines appressed or semicrect, last four raised above level of shaft by a sharply produced base (fig. 9); lower margin with fine appressed spines; both inner margins quite close to each other.

Male genitalia: pygofer longer than deep (figs. 4 and 5), with inner margins straight and meeting along mesal line. Valve spatulate; with long setae on margin of inner apical fourth; clearly angled at about midlength (fig. 8). Aedeagus with well developed basal projection; tubular, curved cephalad, flattened dorsoventrally near apex; gonopore opening subapically; without filaments. Style with anterior end flattened laterally; posterior end tapering, sharp, upcurved, with a few fine long setae on upper margin well before apex, and with lower margin serrate.

Female genitalia: similar to *Idioscopus*. Ovipositor smooth, longer than valves, narrow, straight. Seventh sternum of *B. balcanicus* produced medianly.

Balcanocerus can be separated from Idiocerus and Idiocopus as follows:

	Balcanocerus	Idiocerus	Idioscopus
Anteapical cells	three	usually three	usually two
Vertex	shagreen	usually wrinkled	usually wrinkled
Spines of outer margins of metatibia	appressed	erect or semierect	erect or semierect
Clavus	finely punctured	without punctures	without punctures
Pygofer	longer than deep	deeper than long	deeper than long
Pygofer	with unsclerotized longitudinal area	without such area	with such area
Apodeme of aedeagus	flattened	widened apically	flattened
Style with	few anteapical hairs	usually strong apical setae	microsetae
Callose whitish ornamentation of forewing	present	absent	absent
Aedeagus	without filaments or processes	usually with apical spine-like process	2–4 apical filaments

A bibliographical summary of the mentioned changes follows.

Balcanocerus, n. gen.

Chunrocerus Zakhvatkin, 1946b:155, in part.

Type-species: Idiocerus balcanicus Horváth, 1930a.

Balcanocerus balcanicus (Horváth), n. comb.

Idiocerus balcanicus Horváth, 1930a:24.

Chunrocerus balcanicus (Horváth): Zakhvatkin, 1946b:154.

Idioscopus Baker 1915c:338.

Idiocerus Lewis, 1834a:47. Synonym in part.

Chunrocerus Zakhvatkin, 1946b:155. New synonym, in part.

Idioscopus clypealis (Lethierry)

Idiocerus clypealis Lethierry, 1889c:5.

Idioscopus clypealis (Lethierry): Baker, 1915c:338.

Idioscopus niveosparsus (Lethierry)

Idiocerus niveosparsus Lethierry, 1889c:252.

Chunra niveosparsa (Lethierry): Baker, 1915c:318.

 $Chunrocerus\ nive osparsus\ (\, Lethierry\,)\colon Zakhvatkin,\ 1946c; 155.$

Idioscopus niveosparsus (Lethierry): Maldonado-Capriles, 1964.

REFERENCE

Maldonado-Capriles, J. 1964. Studies on Idiocerinae leafhoppers: II. The Indian and Philippine species of *Idiocerus* and the genus *Idioscopus*. Proc. Ent. Soc. Wash. 66(2):89–100.

THE GENUS ZADIPRION BOHWER

(Hymenoptera: Diprionidae)

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ABSTRACT—Keys and descriptions are given for adults and larvae of the three species of Zadiprion. Neodiprion grandis Rohwer is synonymized with Z. townsendi (Cockerell). Two species of Zadiprion are known from the United States and one species from Mexico. The host plants are various pines.

Zadiprion Rohwer

Neodiprion subgenus Zadiprion Rohwer, 1918, p. 83; Middleton, 1931, p. 166. Zadiprion: Ross, 1937, p. 57; Ross, 1951, p. 19.

Type-species: Diprion grandis Rohwer. Original designation.

Zadiprion may be separated from other genera of Diprionidae by the following combination of characters: supraclypeal area not tuber-

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